(b)–(g) [Reserved]. For guidance see § 86.113–94.

[65 FR 6848, Feb. 10, 2000]

EFFECTIVE DATE NOTE: At 75 FR 25678, May 7, 2010, § 86.113–04 was amended by revising the entry for RVP in the table in paragraph (a)(1), effective July 6, 2010. For the convenience of the user, the revised text is set forth as follows:

§ 86.113–04 Fuel specifications.

* * * * *

(a) * * *
(1) * * *

Item	ASTM test method No.	Value
* * * * * * *		
RVP [2, 3]	D 323	8.7–9.2 (60.0–63.4)
* * * * * * *		

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§ 86.113–07 Fuel specifications.

Section 86.113–07 includes text that specifies requirements that differ from § 86.113–94 or § 86.113–04. Where a paragraph in § 86.113–94 or § 86.113–04 is identical and applicable to § 86.113–07, this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see § 86.113–94.'' or ''[Reserved]. For guidance see § 86.113–04.''.

(a) [Reserved]. For guidance see § 86.113–04.

(b)(1) [Reserved]. For guidance see § 86.113–94.

(b)(2) Petroleum fuel for diesel vehicles meeting the following specifications, or substantially equivalent specifications approved by the Administrator, must be used in exhaust emissions testing. The grade of petroleum diesel fuel recommended by the engine manufacturer, commercially designated as ''Type 2–D'' grade diesel, must be used:

Item		ASTM test method No.	Type 2–D
(i) Cetane Number		D613	40–50
(ii) Cetane Index		D976	40–50
(iii) Distillation range:			
(A) IBP	°F	D86	340–400
	(°C)		(171.1–204.4)
(B) 10 pct. point	°F	D86	400–460
	(°C)		(204.4–237.8)
(C) 50 pct. point	°F	D86	470–540
	(°C)		(243.3–282.2)
(D) 90 pct. point	°F	D86	560–630
	(°C)		(293.3–332.2)
(E) EP	°F	D86	610–690
	(°C)		(321.1–365.6)
(iv) Gravity	°API	D287	32–37
(v) Total sulfur	ppm	D2622	7–15
(vi) Hydrocarbon composition:			
(A) Aromatics, minimum (Remainder shall be paraffins, naphthenes, and olefins).	pct.	D5186	27
(vii) Flashpoint, min.	°F	D93	130
	(°C)		(54.4)
(viii) Viscosity	centistokes	D445	2.0–3.2

(3) Petroleum fuel for diesel vehicles meeting the following specifications, or substantially equivalent specifications approved by the Administrator, shall be used in service accumulation. The grade of petroleum diesel fuel recommended by the engine manufacturer, commercially designated as ''Type 2-D'' grade diesel fuel, shall be used: (b)(4) through (g) [Reserved]. For guidance see § 86.113–94.

Item		ASTM test method No.	Type 2–D
(i) Cetane Number		D613	38–58
(ii) Cetane Index		D976	min. 40
(iii) Distillation range:			
90 pct. point	°F	D86	540–630
(iv) Gravity	°API	D287	30–39
(v) Total sulfur	ppm	D2622	7–15
(vi) Flashpoint, min.	°F	D93	130
	(°C)		(54.4)
(vii) Viscosity	centistokes	D445	1.5–4.5

(h)(1) For model year 2004 through 2006 Tier 2 diesel-fueled vehicles that incorporate sulfur-sensitive technologies, the manufacturer may test the vehicle using a test fuel meeting the specifications listed in paragraphs (b)(2) and (b)(3) of this section, provided the manufacturer clearly recommends to the ultimate purchaser in the owner's manual that the vehicle should use fuel with no higher than 15 ppm sulfur.

(2) For model year 2004 through 2006 Tier 2 diesel-fueled vehicles that incorporate sulfur-sensitive technologies and that are certified for 50-state sale (i.e., certified to California and EPA standards), the manufacturer may test the vehicle using a test fuel whose qualities, on a specification by specification basis, meet the requirements of either the specifications listed in paragraph (b)(2) of this section or the California test fuel specifications, provided the manufacturer clearly recommends to the ultimate purchaser in the owner's manual that the vehicle should use fuel with no higher than 15 ppm sulfur.

(3) Where a manufacturer uses a test fuel under paragraph (h)(1) or (h)(2) of this section, EPA shall use the same fuel for its compliance testing.

[66 FR 5167, Jan. 18, 2001]

§ 86.113–94 Fuel specifications.

(a) *Gasoline fuel.* (1) Gasoline having the following specifications will be used by the Administrator in exhaust and evaporative emission testing of petroleum-fueled Otto-cycle vehicles. Gasoline having the following specification or substantially equivalent specifications approved by the Administrator, shall be used by the manufacturer in exhaust and evaporative testing except that octane specifications do not apply;

Item	ASTM test method No.	Value
Octane, Research, Min	D2699	93
Sensitivity, Min		7.5
Lead (organic):		
g/U.S. gal. (g/liter)	D3237	[1] 0.050
		[1] (0.013)
Distillation Range:		
IBP:[2] °F (°C)	D86	75–95
		(23.9–35)
10 pct. point: °F (°C)	D86	120–135
		(48.9–57.2)
50 pct. point: °F (°C)	D86	200–230
		(93.3–110)
90 pct. point: °F (°C)	D86	300–325
(148.9–162.8):		
EP, max: °F (°C)	D86	415
		(212.8)
Sulfur, weight pct. max	D1266	0.10
Phosphorus, max. g/U.S. gal. (g/liter).	D3231	0.005
		(0.0013)
RVP,[3,4] psi (kPa)	D3231	8.7–9.2
		(60.0–63.4)
Hydrocarbon composition:		
Olefins, max. pct	D1319	10
Aromatics, max. pct	D1319	35
Saturates	D1319	[5]

[1] Maximum.
[2] For testing at altitudes above 1,219 m (4,000 ft), the specified range is 75°–105 °F (23.9°–40.6 °C).
[3] For testing which is unrelated to evaporative emission control, the specified range is 8.0–9.2 psi (55.2–63.4 kPa).
[4] For testing at altitudes above 1,219 m (4,000 ft), the specified range is 7.6–8.0 psi (52–55 kPa).
[5] Remainder.

(2)(i) Unleaded gasoline representative of commercial gasoline which will be generally available through retail outlets shall be used in service accumulation. Leaded gasoline will not be used in service accumulation.

(ii) The octane rating of the gasoline used shall be no higher than 1.0 Research octane number above the minimum recommended by the manufacturer and have a minimum sensitivity of 7.5 octane numbers, where sensitivity is defined as the Research octane number minus the Motor octane number.